SINGLE USE CONCRETE CYLINDER MOLD VERIFICATION PROCEDURE #45

May 2, 2002

Equipment Checked: **SINGLE USE CONCRETE CYLINDER MOLDS (AASHTO T 23 & AASHTO M 205)**

Purpose:

This method provides instructions for checking elongation, strength, absorption, and water leakage of paper molds. For plastic molds, check for water leakage and strength.

Inspection Equipment Required:

1. Caliper readable to 0.001"
2. Balance readable to 0.1 gram
3. Glass plate to cover 6" diameter cylinder
4. Tapping rod

Tolerance:

The molds shall meet the tolerances listed in AASHTO M 205

Procedure:

1. Fill mold with dry crushed coarse aggregate passing the 3/4" sieve and retained on the No.4. Fill mold in three layers, rodding each layer 25 times. After rodding final layer, empty the mold of the aggregate. Wipe inside of mold with dry cloth and check for physical damage.

2. Weigh mold to the nearest 0.1 gram and measure the height to the nearest 0.001".

3. Place mold on firm flat surface and fill with water at room temperature to a depth of 90 to 95% of the mold height.

4. Place mold on the dial stand, cover mold with the glass plate and using the caliper, record the mold height to the nearest 0.001".

5. Allow mold to stand for three hours and take a second reading with the caliper. Examine and record any visible leakage. Empty water from mold, dry lightly with towel, and record the final weight to the nearest 0.1 gram.

6. Calculate elongation as the difference between the final height and the initial height. Calculate absorption as the difference between the final weight and the initial weight.

EQUIPMENT CALIBRATION RECORD

Calibration Procedure No. 45 Concrete Cylinder Molds - Single Use (AASHTO T 23 & AASHTO M 205)

Date:	**Calibrated by:**
Previous Calibration Date:	**Next Due:**
ID No.:	
Frequency: Each shipment	
Calibration Equipment	**Serial Number**
Height gauge	
Glass plate 7x7" 1/4" thick	
Balance readable to 0.1g.	
Comments:	
Condition of Molds after Rodding: Good _____ Bad _____	

Weight of molds

#1	#2	#3	#4	#5	#6	
_____	_____	_____	_____	_____	_____	Final
_____	_____	_____	_____	_____	_____	Initial

Height of molds

_____	_____	_____	_____	_____	_____	Final
_____	_____	_____	_____	_____	_____	Initial

Diameter

_____	_____	_____	_____	_____	_____

Length

_____	_____	_____	_____	_____	_____

Any physical damage or leaking?_____

5/3/2002